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SELF-CONTROL IN CHILDREN.

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*PARENTAL BACKGROUND, *PARENT ATTITUDES, *DISCIPLINE, *CHILDREN, *PARENT REACTION, INDIVIDUAL DEVELOPMENT, CHILD DEVELOPMENT, CHILDHOOD ATTITUDES, EDWARDSVILLE, ILLINOIS

THIS STUDY HAD TWO MAJOR OBJECTIVES--(1) TO STUDY CHANGE IN SELF-CONTROL AS A FUNCTION OF CHRONOLOGICAL AGE, AND (2) TO INVESTIGATE CERTAIN MAJOR VARIABLES PREVIOUSLY SUGGESTED AS MAJOR CORRELATES OF THIS DEVELOPMENT--NAMELY SEX, PARENTAL ATTITUDES, AND TYPES OF SETTING. IT WAS STATISTICALLY CONCLUDED THAT THE MAJOR VARIABLES CONCERNED, SUCH AS EXPERIMENTER, TEACHER, AND COOPERATING FAMILIES, HAD NO APPRECIABLE EFFECT ON THE COLLECTED DATA. OTHER CONCLUSIONS WERE--(1) THERE WERE NO DIFFERENCES BETWEEN BOYS AND GIRLS IN THEIR ABILITY TO RESIST TEMPTATION, (2) GIRLS TENDED TO SHOW MORE CONTROL THAN BOYS IN THAT THEY RESISTED THE TEMPTATION OBJECTS FOR A LONGER PERIOD OF TIME AND PLAYED WITH THEM LESS AFTER FINALLY SUCCUMBING, (3) THERE WERE NO DIFFERENCES BETWEEN THE AGE GROUPS FOR EITHER SEX IN THEIR ABILITY TO RESIST TEMPTATION, THE TIME IT TOOK OFFENDERS TO SUCCUMB, OR THE AMOUNT OF TIME ENGAGED IN TEMPTATION BEHAVIOR, (4) THE CHILDaS BEHAVIOR IN REGARD TO SELF-CONTROL WOULD APPEAR TO BE RELATED TO THE SETTING IN WHICH HE IS OBSERVED, (5) CHILDREN WHO ARE WELL BEHAVED AT HOME WILL NOT NECESSARILY BE PERCEIVED THAT WAY IN THE SCHOOL SITUATION, (6) CHILDREN WITH WARM, ACCEPTING MOTHERS TEND TO EXHIBIT LESS SELF-CONTROL THAN CHILDREN OF MOTHERS WHO ARE LESS WARM AND MORE STRICT IN THEIR APPROACH TO CHILD REARING, AND (7) FATHERSa ATTITUDE TOWARD CHILD REARING DID NOT APPEAR TO BE SIGNIFICANTLY RELATED TO THE BEHAVIOR OF THE CHILDREN IN THIS STUDY. (LP)

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FINAL REPORT
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SELF-CONTROL IN CHILDREN

September, 1966

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

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Project No. 2971
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Richard P. Walsh

September, 1966

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Edwardsville, Illinois

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I. Introduction

A. Problem

The ability of the human to exercise self-control is one of the major requirements of any societal group. As Walker and Heyns (30) put it, "....even Tombstone, Arizona had its code," (p. 2). Next to the family, the school system is probably the most important institution that is required to cope with the problems of the development of this capacity. For the school, under-control can present several problems. First is the rather obvious one that an under-controlled child can be disruptive to the classroom situation. This does not necessarily refer to the "bad" child, or troublemaker, but often to the child who cannot discipline himself to the necessary rules of the class. Related to this is the work of Meyer and Thompson (22) which indicated teachers respond differently to boys and girls, tending to disapprove more of the former. In light of the work to be referred to later by Sears, et. al. (28) indicating girls show more self-control than boys of the same age group, one would wonder if this source of irritation is due to slower development in this area.

Treatment by early teachers can be quite important since it no doubt colors how the child perceives future educational experiences. Perhaps more knowledge in this area would help some teachers become more understanding of the problem, and instead of responding with discipline, would respond with help. Magoon (20) has recently reported that under-achievement can be traced back to beginning grades of school. Again, since this is a more serious problem with boys than girls, these early classroom encounters may serve as negative reinforcements toward school.

Evidence is gradually being gathered regarding the development of self-control, and the pieces are slowly fitting together. However, there is still much work to be done and refinements to be made before a full understanding of this complex area can be approached.

It would be presumptuous to suggest the present research offers final answers to all or any of these areas. It is contended, however, that unless there is a better understanding of the underlying processes behind self-control, there is no foundation upon which to build studies that would attack these problems more directly.

B. Objectives and Hypotheses

1. Objectives. The study had two major objectives: (a) to study change in self-control as a function of chronological

age; and (b) to investigate certain major variables previously suggested as major correlates of this development. Namely sex, parental attitudes, and types of setting.

2. Hypotheses. In order to achieve these objectives, the study was designed to study five major hypotheses:

a. No difference will exist between the sexes in their ability to resist temptation.

b. No difference will exist between children of the various age levels and their ability to resist temptation.

c. No difference will exist between children who successfully resisted temptation and those who did not in their ability to correctly identify photographs of the temptation objects.

d. There will be no difference between the child's ability to control himself in any of the formally recorded conditions.

e. There will be no difference in the degree of behavioral control of children who are rejected versus those who are not.

C. Related Research

Excellent reviews of the literature have recently been presented by Burton (8) and Kohlberg (17) which reflect the contemporary magnitude of interest in this area. Kohlberg's review, which was more general, for example, cites 141 relevant studies. In attempting to lay the necessary groundwork for this study, no attempt will be made to be that inclusive. Instead, emphasis will be placed on the major and/or typical studies reflecting findings for each of the particular areas under study.

1. Age. There are two names that stand out the most in the history of age as a variable in behavioral control, Freud (12) and Piaget (25).

Freud maintained that somewhere around the sixth year, the child, through a process called identification, began to internalize control of his behavior through the development of a "super-ego." This super-ego reflected the "forbidden" as actually transmitted or perceived by the child. All the clinical aspects of this concept are beyond the scope of this history. However, the significant feature of Freud's pronouncement was the age at which this transition was said to occur. Within rough developmental limits, Freud would lead us to believe that a demonstrable,

recognizable change should take place around this age in the child's ability to exercise self-control.

Piaget's work brings us to an almost identical conclusion. While Freud reached his findings as a result of introspection and psychoanalysis with patients, Piaget and his co-workers read stories to children and quizzed them regarding the moral aspects and outcomes. His results indicated that around age 6, children held a concept of "imminent justice," i.e., that all transgressions resulted in punishment. This would imply that the child sees control as coming from something external in a direct and unerring way. Beyond this age, there is a growing incorporation of the principles of "ethics of mutual respect" where the child develops the idea that morality is its own reward, and he has control over the effects of his behavior.

Both of these theories are oversimplified here. But again, they both reflect a change occurring in the child in terms of his mutual development and internalized control. Both, also, have inspired considerable additional research.

Piaget's work, for example, has been replicated in many other cultures. Some typical ones were Harrower (14) in England, Dennis (9) with American Indians, and Liu (18) with Chinese-Americans. In reviewing this research, Boehn and Nass (4) concluded that the only consistently operative factor in development toward maturity was age. They also reported, however, that the sociocultural differences frequently affected the age at which the shift occurred. Others have basically agreed with this interpretation, notably Kohlberg (17) and Peel (24). On the other hand, Bronfenbrenner (6) and Aronfreed (2) chose to emphasize the social status aspects over age.

In contrast to the Piaget-type studies, the work of Sears, Maccoby, and Levin (28) appears to be more closely aligned to the Freudian hypothesis, particularly in regard to the effects of identification. In 1957, these authors published findings of their study in patterns of child rearing. Among the numerous variables investigated was that of behavioral control. Although they felt that the process of internalizing control is not quite the rapid overnight process suggested by Freud, they found that by the child's sixth year, he was generally found to be well into this process and that even as young as the second year, the rudiments could be observed (e.g., not touching ashtrays). They hypothesized that the major part of the process was occurring between the 6th and 10th year but quite probably even went on into adulthood. Most evidence since this study has supported the notion that this is not a simple, defined limits sort of process.

The Sears et. al. data served as a fertile ground for additional research, most of which tended to support and elaborate on the initial findings. Perhaps one of the most important innovations was the inclusion of a temptation situation. As this is pertinent to the present study, one prototype will be presented in some detail, and the findings will be reviewed.

The study to be reported is that of Grinder (13) who employed children from the original Sears' study six years later at age 12. This enabled him to utilize background data for various related hypotheses. Going into the appropriate schools, he told the children that he wanted them to play a little target-shooting game. Depending on their score, they could win one of three brightly colored badges, "marksman," "sharpshooter," or "expert." The children were then placed alone in a room with the apparatus and told that the experimenter had to go elsewhere to do some work and would the child kindly keep his own score. The apparatus had been previously programmed to make winning impossible except by cheating. Of basic interest is the fact that 70% (N=98) succumbed to "temptation" while only 30% (N=42) did not. Theoretically, one might have expected the odds to be reversed by this age. Grinder related this to child rearing practices to be discussed later.

Rebelesky (26) employed the same subjects as Grinder, testing them before and after the experimental condition. Rebelesky was interested in the use of confession by these subjects as measured by projective-like stories. She found no difference between cheaters and non-cheaters, although there was a slight trend for girls to use confession more than boys.

A similar study was reported by Burton, Maccoby, and Allinsmith (7) using four-year old children from private nursery schools in the greater Boston area. The experimental condition consisted of a rigged beanball game. To further convey the impression of "aloneness," these authors had the child lock them out of the room on the pretext that they didn't want the child to be disturbed. The percentage of "non-cheaters" in the study was 35% and 65% for 'cheaters." This is remarkably close to Grinder's figures.

There are other studies as well, but these cited illustrate (a) the typical modes of investigation; and (b) the conflicting (with theory) data.

2. Sex. Early studies on behavioral control placed no great stress on possible sex differences. Piaget (25), in general, ignored this variable and only mentions a differential response to the question in response to aggression where more girls held to the concept of imminent justice than boys. In their classic study of deceit, Hartshorne and May (15) reported significant sex differences on three of their eight tasks, favoring the girls.

Sears, Maccoby, and Levin (28) also reported sex differences saying that girls show significantly more "high conscience" (as measured by confession to mother) than did boys.

These differences have not been a consistent finding, however. In the case of Piaget's approach, Bronfenbrenner (6) tells us that the issue is still a completely open one due to conflicting results. Furthermore, in the resistance to temptation situation, Grinder (13); Rebelesky (26); and Burton, Maccoby, and Allinsmith (7) failed to find any sex differences. The only exception was that Rebelesky (26) reported a trend for girls to use confession in stories than boys.

In reviewing the literature, Kohlberg (17) reports the following summaries in regard to sex differences: (1) Girls are more conforming to rules and regulations than boys; (2) There are no substantial general differences between boys and girls in conformity to internalized moral standards; (3) There are no clear differences in strength of tendencies to feel guilty after deviation; (4) No clear-cut, consistent differences have been found between boys and girls in measure of total identification with the same sex parent or with both parents; (5) Boys are more rules - or justice - oriented in their expressions of indignation and sympathy; and (6) Boys are more willing to accept rules for their own behavior if they enforce these rules upon others.

3. Generality. In 1928 and 1929, Hartshorne and May (15, 16) conducted what has become a classic study in the area of deceit. These authors tested over 8000 children of various class levels and in a variety of schools on certain tasks which were conducive to deceit. These tests are adequately described by the authors, but in general, they covered a range of areas such as athletic contests, party games, puzzles, classroom tests, home tests. Their conclusion was that deceit occurs on a large scale but that there is no such thing as a general trait of honesty. Instead, they conclude that the setting and the motivating factors around the setting more largely determine whether or not an individual will be deceitful. They reached this conclusion on the basis that the less similar the tasks were, the less correlation existed between them in regard to cheating.

Burton (8) reopened the case by performing a factor analysis of the original correlations from the Hartshorne and May data. He used only those subtests which had a reliability coefficient of .70 or better; namely, copying, speed, peeping, talking, athletic, and lying. As a result of his analysis, he drew a slightly different conclusion from the data. Because of the loadings of the first factor extracted, Burton felt there was evidence to justify an underlying generality in moral behavior.

On the other hand, he felt enough variance remained that there were probably also specific test determinants. To explain his results, he proposed a model consisting of two generalization gradients, one involving just the stimulus elements of any particular situation and the other to verbal mediation where cognitive elements from one situation are generalized to a different and perhaps entirely new setting. The latter probably accounts for the generality that occurs according to Burton.

Burton points out that others also support this generality hypothesis, such as MacKinnon (19), Maller (23), Brogden (5), Barbu (3), Allport (2), and Eysenck (11).

4. Antecedent Conditions. The final area of exploration was that of antecedent conditions of the development of behavioral self-control. Of particular interest was the effects of rejection by one or both parents.

In analyzing his data, Sears (28) took the stand that identification theory would predict that acceptance would facilitate conscience development while rejection would inhibit it. His data supported this hypothesis in a mild but not statistically significant way.[1]

While it is true that the natural identification process may work in this manner, identification is also a defense mechanism that is frequently employed against feared objects. Thus it might also be predicted that a rejected child would also employ identification, and as a result, develop high conscience. Also, the rejecting parent probably emphasizes the "thou-shalt-nots" over positive matters, and thus it would be expected that the rejected child might be overly concerned with such things. Going one step further, taking into account both functions of identification, the two extremes might be more like each other than the middle group.

This hypothesis is given support by the Burton study (7) in which the author found that some training techniques were correlated with conformity that would seem to reflect rather severe socialization processes such as severity of weaning, long toilet training, etc. In support of Sears (28), they found conformity was also associated with several permissive variables such as permission to touch an object before saying, "no."

[1] We are speaking now of the child who is rejected but tolerated as long as he conforms. The completely rejected and isolated child probably does not even try to conform and thus would not identify and probably would be retarded in conscience development. It is also doubtful if we would encounter this severe form of rejection in a middle-class sample due to conformity to establish parental roles.

In approaching this problem in the present study, it was assumed that there were two types of rejection, "generalized" and "specific." The "generalized" refers to the point that the parent(s) hold a neutral or negativistic attitude in general toward children which is generalized to immediate children in the family. This idea is explored more fully elsewhere (Walsh, 31). In essence, however, it is predicated on the notion that there is considerable pressure on the American family to have at least one child. The most frequent question asked after "when are you going to get married?" is "when are you going to have any children?" In the face of such conformity pressures, the rejection probably becomes unconscious. For that reason, projective techniques were employed to explore this aspect.

5. Summary. The literature cited, then, seemed to give some support to the major hypotheses of this study. The next step involved developing a design which would provide the greatest chance to explore these hypotheses. This is presented in the next section.

II. Procedure

A. Experimenters

All the experimenters were female and over 21 years of age. Of the original four, three were housewives with children and the fourth a major in psychology. With the pressures of time, three more were added late in the study, two of whom were also housewives and the third another psychology major. All were outgoing and friendly and had a genuine interest in children. They were divided into working teams of two that switched off the roles of observer and experimenter. Occasionally, teams had to be reshuffled to meet interview schedules, but the original notion that no individual would serve on the same home team of the child they had observed in school was maintained.

B. Subjects

The subjects were 114 children (53 boys and 61 girls) from a local elementary school. The school had been recommended by the Board of Education as one which drew from a relatively homogeneous community (upper-lower class). The age group covered was from 6 years, 0 months, 0 days to 7 years, eleven months, 29 days. While it can certainly be argued that formation of behavioral control takes place before and after the lower and upper limits cited, the literature as presented in a previous section indicated this should be the most active period of development. The children were divided into four six-month groups of approximately 30 each.

C. Research Settings

1. Solitary Temptation Situation. This phase of the study was conducted in the school itself in a large room (approximately 20' x 30') equipped with a table, chair, desk, and clock and to which an observation booth was added. A diagram illustrating the layout is included in the Appendix A.

The observation booth was gaily painted and decorated to resemble a carnival-like puppet show booth. The observation mirror was covered with a cheesecloth-like curtain which could easily be seen through from the inside but masked the mirror from the outside. Only one child gave any overt evidence that he suspected its purpose. On the table, a number of toys and a jar of candy were prominently displayed (see Appendix A for list of toys used). On the desk was a game (Smack-A-Roo) which represented the purported purpose of the session.

While O[2] was hidden in the booth, E went to a classroom and brought back a child. The child was then seated in the chair, and E asked for name, age, etc. E then "suddenly" remembered she had to make a phone call and said the following to the child: "Oh, I just remembered that I promised to call someone at this time. I'm going to have to leave you here for fifteen minutes" (she then went to the clock and pointed out the time of return). "When I get back, we'll play a game, and you can show me how good you can do it. And, oh yes, don't touch any of the things on the table. They don't belong to us; they're for some party in another grade."

E then left for fifteen minutes while O recorded the child's actions minute by minute.

In this setting, the dependent variable was the child's behavior in response to the temptation situation. Three major categories were used:

a. The child showed none or minimal interest in the props. Visual observation while remaining seated fell into this classification.

[2] From this point forward, the person acting as observer in either the temptation situation or the home will be referred to as "O." The person actually conducting the study at the time will be referred to as "E."

b. The child showed an interest in the props but did not play with them. In this case, behaviorally, the child left the desk, approached the props, and may have even lightly fingered them.

c. The child went to the toys and played with them or ate some of the candy.

At this point, it had originally been intended to show the child pictures of the used toys as well as others to see how many he correctly identified. However, mechanical difficulties with the camera and the fact that some of the subjects were being tested during the approaching Christmas season led to discarding this part of the study.

When E returned to the room, she played the game with the child, lavishing praise, etc. She then took the child over to view the toys and handle them a little. This was done in hopes of alleviating any guilt that the transgressors may have experienced. Following this, the child was returned to his room, and the procedure was repeated with another child.

2. Mother's Interview and Child-Mother-Experimenter Situation. The mother of each child observed was sent a letter asking her cooperation in our study (see Appendix B for copy of the letter). The letter was followed up by a phone call from one of the experimenters to set a specific date.

Two E's went as a team. No E served on a team interviewing the parents of any child they had observed in the temptation situation. One of the E's was introduced as a "trainee" who would just observe to learn how to conduct future interviews.

As much as possible, E endeavored to arrange the seating so that she was directly across from the mother and child, and the child was at the mother's side. The second E sat in the background.

In the process of minor small talk, E opened her attache case and placed it at some spot within the child's view. Removing a set of interview forms from the case revealed a number of small "knick-knackish" sort of toys. She then began her interview of the mother, ignoring the child. E was under strict instruction to do nothing if the child either invaded the case or played with the tape recorder.

About three quarters of the way through the interview[3], E suggested that things might be "speeded up" by having the child go with O to another room to tell some stories while they finished up this interview.

Both mother and child were then shown selected pictures from the Travis Projective Pictures set and asked to tell stories about them.

Finally, mother was left two copies of the Parental Attitude and Research Instrument (Schaeffer and Bell, 1957), one for each her and her husband, along with self-addressed, stamped envelopes and asked to return them within a week. It was requested that they each do this independently. A copy of this scale can be found in Appendix C.

3. School Room Situation. Each teacher was asked to rate the children employed from her room on the basis of their classroom behavior or degree of self-control.

D. Measures

1. Temptation Situation. Three measures were obtained regarding reaction in the temptation situation. First, the child was classified into one of three groups, depending on his behavior: (a) showed minimal or no interest in the props; (b) showed an interest but did not significantly disturb or touch props; and (c) succumbed to temptation. Preliminary training was given all E's on making these judgments, and it appeared a simple task. Next, for those who succumbed, O recorded the number of observation units (one unit=one minute) that elapsed before the child succumbed and during how many of these observation units the child actually played with the toys or props. Any playing during a unit counted for the whole unit, e.g., if the child played with the toys for fifteen seconds, it counted as a whole unit.

2. Sears' Interview Guide. For the home interview, a modified version of the form used by Sears et. al. (28) was chosen. A copy is included in Appendix C. In the selection of items, only those which seemed pertinent to the aims of the study were chosen, in addition to a few relatively innocuous items. Items on sex, breast feeding, toilet training, etc., were excluded on the basis that this information was not needed and was most apt to destroy rapport.

[3] This breaking point was chosen for two reasons: (1) The child had been observed for roughly an hour; and (2) We were about to begin a series of questions about the mother's reaction to her pregnancy with the child. We felt the child's presence may serve as an inhibitor.

3. Parental Attitude Research Inventory. This measure was included as another way to tap rejection. Three clinical psychologists evaluated the scales and were asked to select ten which, in their clinical judgment, were indicative of rejection. They were asked to do this both for mothers and for fathers. Of those selected, five were agreed upon in each category by all the judges, and only the scores of those particular scales were used. For the mothers, these were: (a) breaking of the will; (b) fear of harming the baby; (c) avoidance of communication; (d) intrusiveness; and (e) acceleration of development. For the fathers, the five scales were: (a) breaking of the will; (b) strictness; (c) avoidance of communication; (d) intrusiveness; and (e) approval of activity. Although there was considerable overlap among the judges on other scales with agreement of two out of three very common, the more stringent approach of complete agreement was used.

4. Travis Projective Pictures. Projective pictures were also employed for the rejection part of the study. Although Travis makes no pretense of this being a standardized test and reports no validity or reliability figures, it did have "face validity" for the purposes of the present study. That is, the content of adult and child interaction seemed appropriate to the problem. Again, three clinical psychologists were asked to view the pictures and select those they felt would be most apt to reflect rejection by the mother and feelings of rejection by the child. Two sets of ten pictures each (one for mother and one for child) were thus developed on the basis of agreement of two of the three judges. The judgment here was more difficult to make than with the PARI and would have reduced the number of stimuli if selection had been as rigid as above. It was felt that increasing the samplings would provide a better picture of feelings.

Each protocol was submitted to blind analysis by a clinical psychologist unconnected with the study. He was asked to evaluate each picture in a given protocol on the basis of whether or not the adults in the picture appeared to be negative toward the children portrayed, ambivalent toward them, or accepting of them. Lowest possible minimum total rating per protocol (indicating extreme rejection) was 10. The highest possible rating (indicating extreme acceptance) was 50.

Because of the paucity of content in the children's stories, each picture in a given protocol was rated grossly as "Positive" or "Negative." The protocol itself was then given a rating of "Positive" or "Negative," depending upon how the majority of individual pictures were rated.

5. School Ratings. After discussing this with the school principal and teachers, it was decided that a modified version of report card ratings might be the most appropriate scale to use here. The modification simply involved extending the usual two-point scale of rating to a four-point one. The items rated were: (a) shows courtesy and respect to others; (b) listens without interrupting; (c) works neatly and carefully; (d) pays attention to class discussion; and (e) follows instructions. Weights of 4, 3, 2, and 1 were arbitrarily assigned to the four categories of Always, Usually, Seldom, and Rarely and added together over the five scales. Thus a score of 20 would indicate a very well-behaved child, while a score of 5 would indicate a child with which the teacher experienced difficulty.

III. Results

A. Analyses of Potential Intervening Variables

In a study involving the complexities of this one, there are a number of variables operating which could conceivably influence the results. The effects of such factors as the experimenter, teacher, cooperating families, etc., needed to be examined before the data itself could be analyzed. The results of these analyses will be presented now in narrative form.

1. Experimenter. As mentioned in the procedure section, no deliberate effort was made to match experimenter and child, and all four experimenters took turns observing and conducting the study. A chi-square analysis was conducted for experimenter versus behavior of the child in the temptation situation. The X^2 obtained was 8.0, which was not statistically significant (df=6; 12.6 needed for .05 level). It would appear that the particular experimenter was not a crucial factor in this study.

2. Teacher and Classroom. Children used in the study were drawn from six different classrooms. Chi-square was again used to determine whether or not there was any bias in the temptation behavior which could be attributable to any particular teacher or any particular class. The chi-square here, with 10 df, was 12.93 which also was not significant (18.3 needed for .05 level). It would appear the effects of this variable could also be dismissed.

3. Participating Versus Non-Participating Families. Of further concern was any differences in behavior of children from families who willingly cooperated in the interview session versus those that did not. First, all those who had legitimate reasons for non-cooperation were eliminated. For example, one mother entered the hospital for a long period of treatment and recuperation. Dividing the remaining families into Cooperating

and Non-Cooperating, the data obtained from these children in the temptation situation was examined. The analysis yielded a chi-square of 3.01 which was less than the 6.0 required at the .05 level for 2 degrees of freedom.

From these results, it was concluded that none of the three major variables of concern: (1) experimenter; (2) teacher; and (3) participating families, had any appreciable effect on the collected data.

B. Experimental Analyses

1. Hypothesis I. No Differences Will Exist Between the Sexes in Their Ability to Resist Temptation.

This hypothesis was approached in two ways. In the first case, the number of children that fell into each temptation category by age and sex were tabulated. In the second analysis, those that succumbed to temptation were compared in terms of: (a) the latency time involved prior to succumbing; and (b) the total amount of time involved in play activity. Since this is one of the cases where previous studies report either no differences or results favoring the girls but never the boys, a directional, one-tailed test was employed. Table 1 presents the frequency counts by age and sex.

Table 1

Reactions to Temptation by Age and Sex

AGE	MALE						FEMALE					
	I		II		III		I		II		III	
	N	%	N	%	N	%	N	%	N	%	N	%
6-6.5	5	33	5	33	5	33	4	22	7	39	7	39
6.6-7	6	46	3	23	4	31	6	35	5	29	6	35
7-7.5	5	36	3	21	6	43	4	25	4	25	8	50
7.6-8	2	18	3	27	6	55	5	50	3	30	2	20
TOTALS	18	34	14	26	21	40	19	31	19	32	23	36

X^2 =.56 not significant

It was found that over-all, 39% (N=44) of the children succumbed to temptation while 61% (N=70) did not. Breaking this down by sex, 40% of the boys (N=21) played with the props or ate some candy; 60% (N=32) did not. For the girls, the figures were 38% (N=23) and 62% (N=38), respectively. Statistically examining the hypothesis of no differences between sexes in their ability to resist temptation, a chi-square of .56 was obtained, which is not significant, and the null hypothesis was accepted. Each age group presented almost identical patterns of offenders and non-offenders for both boys and girls. However, these figures are almost the direct opposite of those reported by Grinder (13) and Burton (7) and will be commented on in the Discussion section.

The second analysis involved just the behavior of the offenders. These results are presented in Table 2.

Table 2

Time Reactions of Succumbers by Age and Sex

AGE	MALE				FEMALE			
		Latency		Play Time		Latency		Play Time
	N	$\bar{X}$	s	$\bar{X}$	s	N	$\bar{X}$	s	$\bar{X}$	s
6-6.5	5	2.80	.73	5.00	1.30	7	5.28	1.98	4.57	1.21
6.6-7	4	1.75	.48	10.50	2.73	6	5.33	2.11	4.50	1.94
7-7.5	6	7.00	1.92	6.00	1.75	8	6.50	1.70	2.38	.56
7.6-8	6	2.83	.60	7.66	1.52	2	7.50	n.c.	3.00	n.c.
TOTALS	21	3.81	3.41	7.15	3.96	23	5.91	4.47	3.65	3.20

$t_{Lat} = 1.62$ sig. .06

$t_{Pt} = 3.24$ sig. .005

n.c. - not calculated

This analysis produced two very interesting results. First, that the girls resisted temptation longer than did the boys (t=1.62 significant at .06 level) and second, they spent significantly less time engaged in the temptation behavior (t=3.24 significant at .005 level). In all age groups but one (7-7.6),

the boys who yielded tended to do so within the first two to four minutes ($\bar{X}$=3.81) as compared to the girls who usually held out for five or six ($\bar{X}$=5.91). In all age groups, the boys extended their play period for a good third of the total time, ($\bar{X}$=7.15) while the girls withdrew to their former controlled behavior fairly rapidly ($\bar{X}$=3.65). These findings would appear to confirm that girls are farther along in their maintenance self-control at these ages than are boys.

In summarizing the results for Hypothesis I, it was found that there were no differences in the total number of children of either sex in their ability to resist temptation. However, girls appeared to be able to restrain themselves longer as well as to limit their transgressions more than boys.

2. Hypothesis 2. No Differences Will Exist Between Children of the Various Age Levels and Their Ability to Resist Temptation. Table 3 presents the total frequencies and percentages of temptation and age.

Table 3

Age Versus Temptation Behavior

TEMPTATION BEHAVIOR	AGE							
	6-6.5		6.6-7		7-7.5		7.6-8	
	N	%	N	%	N	%	N	%
I	9	28	12	40	9	30	7	33
II	12	36	8	27	7	23	6	29
III	12	36	10	33	14	47	8	38

X^2=3.35 not significant

Since there were no differences between boys and girls on this dimension, the total sample was used. Subjects were found to be more or less equally divided in all cells of temptation x age combinations, and the calculated chi-square of 3.35 was not significant. For the present experimental situation then, age did not seem to be a significant factor in whether or not a child would yield to temptation.

Because of the sex differences found in latency time and play time between boys and girls, each of these variables were examined separately by sex. Means and variances have already been reported in Table 2. F_{max} tests were conducted for each analysis to examine the hypothesis of homogeneity of variance. For those interested, tables containing sums of squares for these analyses are presented in Appendix D.

Two of the F_{max} tests were significant at the .05 level of confidence, the one for age versus latency time - males; and the one for age versus play time - girls. However, this violation of homogeneity of variance did not seem severe enough to discard the analysis. With the exception of age versus latency - males, none of the F tests were significant. In that case, F was significant at the .05 level (F=15.96).

Although the latency means increased very nicely for females over age and the play time means decreased accordingly, this trend was not picked up as a significant one in the analyses of variances. The over-all conclusion from this data is that no differences existed between the various age levels in either latency time or play time for either sex. Thus the null hypothesis is accepted. In regard to Hypothesis 2 then, it would appear that chronological age was not an important variable in this type of temptation situation.

3. Hypothesis 3. No Difference Will Exist Between Children Who Successfully Resisted Temptation and Those Who Did Not in Their Ability to Correctly Identify Photographs of the Temptation Objects. Mechanical difficulties with the camera and the approaching Christmas season led to the abandonment of this hypothesis. While the results might have been of interest in terms of awareness of the toys on the part of the child, it was a secondary hypothesis and not of great concern to the study.

4. Hypothesis 4. There Will Be No Difference Between the Child's Ability to Control Himself in Any of the Formally Recorded Conditions. The behavior of the child had been observed in the temptation situation and the home by the experimenters and in the schoolroom by the teachers. The next question was aimed at how the behaviors in these three settings relate to each other. Table 4 presents the data for the temptation situation versus home observation. Of the 55 children observed in both situations, 28 maintained their same type of behavior while 27 did not. Of those who yielded to temptation in the school, 75% (N=15) were well behaved at home. Of more of a surprise was the fact that 34% of those who had been rated as "well controlled" or just "naturally curious" at school, now yielded to temptation in the home! (N=5 for Group I and N=7 for Group II). As might be expected from the percentages, there was

a statistically significant difference between the amount of change each group showed, with the yielders changing their behavior more radically once they were in the home (X^2=8.44, significant at the .01 level).

Table 4

Temptation Situation Versus Home Behavior

	TEMPTATION GROUP		NON-TEMPTATION GROUP	
	N	%	N	%
Behaved Same at Home	5	25	23	66
Changed Behavior	15	75	12	34

X^2 =8.44 significant at .01 level

When both groups were put together and a comparison was made on the basis of how many children behaved the same in both settings, the degree of changed behavior was significant at the .07 level (X^2=3.02).

The group that changed versus those that did not was then examined for sex and age differences. Tables 5 and 6 contain this data. There were no sex differences found for the changes in either the "temptation group" or the non-temptation group, nor was any significant difference found in age.

Table 5

Change as a Function of Sex

	CHANGE		NO CHANGE	
	Temptation	Non-Temptation	Temptation	Non-Temptation
Girls	8	8	4	15
Boys	7	4	1	8

X^2 Temp.=1.11 not significant

X^2 Non-Temp.=>1 not significant

For those who were non-temptation at both settings, the mean age was 80.43 months. For those who changed at home, the mean age was 83.67 months. For the temptation group, the means were 81.79 and 82.00 months respectively.

Table 6

Change by Age

	TEMPTATION GROUP	NON-TEMPTATION GROUP
Changers		
$\bar{X}$	82.00	83.67
s	3.56	5.99
Non-Changers		
$\bar{X}$	81.79	80.43
s	5.56	6.89

$t_{Temp.=>1}$ not significant
$t_{Non-Temp.=1.38}$ not significant

The observer also recorded how the mothers handled the situation when the child did touch the props in the home. Most of the mothers (76%) did absolutely nothing; letting the child do as he wished, 12% made a direct physical intervention (e.g., pulled child back), and 12% verbally told the child to stop (and were usually ignored).

The next step involved comparing how the children behaved in the temptation situation versus how they were rated by their classroom teacher. Table 7 presents this data.

The analysis was conducted for the total sample. Boys and girls who behaved in a very controlled way in the temptation situation (Group I) also tended to be rated much higher by their teachers than the naturally curious (Group II) and the succumbers to temptation (Group III). These findings were at the .01 level and .05 level of significance, respectively. The mean for Group I was 16.53, for Group II it was 14.42, and for Group III, it was 15.12. Interestingly enough, there was no statistical significance between the means of Group II and Group III. They were perceived by their teachers as behaving in much the same way in the classroom situation.

Table 7

Temptation Behavior Versus Classroom Rating

TEMPTATION BEHAVIOR	BOYS			GIRLS			COMBINED		
	N	$\bar{X}$	s	N	$\bar{X}$	s	N	$\bar{X}$	s
I	17	16.00	3.43	19	17.00	2.67	36	16.53	3.05
II	14	13.93	3.43	19	14.79	3.66	33	14.42	3.54
III	20	14.20	2.91	23	15.91	3.29	43	15.12	3.20

$t_{I\&II}$=2.66 significant at .01 level
$t_{I\&III}$=1.99 significant at .05 level
$t_{II\&III}$=.90 not significant

In the final analysis, home behavior was compared to school ratings (Table 8). Children who yielded to temptation at home had a mean behavior rating of 17.24 in the school, while children who were controlled at home had a mean rating of 15.53. Comparison of these means yielded a t of 1.87 which was significant at the .07 level.

Table 8

Home Behavior Versus Classroom Rating

	N	$\bar{X}$	s^2
Temptation	17	17.24	7.94
Non-Temptation	38	15.53	10.69

t=1.87 significant at .07 level

In reviewing the findings concerning settings then, the child who showed considerable self-control in the temptation situation was also viewed by his teacher as a controlled child in the classroom. Of these same children, they also tended to be well behaved at home, although 34% of this group did show a reversal of behavior in this latter setting, playing with the toys and equipment. Those that succumbed to temptation were seen as

significantly less controlled by the teachers than those that did not, although the ratings did not discriminate between temptation subjects and "naturally curious." At home, 75% of this temptation group were well controlled and paid no attention to the props. Finally, those who were well controlled at home were rated by the teachers as showing less self-control in the classroom than those who were not self-controlled at home. It would appear then that the setting has some effect, at least on some children. Their behavior in the temptation situation and the schoolroom was more similar to each other than either of these two settings was to the home situation.

5. Hypothesis 5. There Will Be No Difference in the Degree of Behavioral Control of Children Who Are Rejected Versus Those Who Are Not.

a. PARI Analysis. This Inventory was returned by 38 of the interviewed mothers, and the data are presented in Table 9. The mean score for the mothers of Group I children were higher in every case than those of either of the other two groups. The probability of this occurring, using the sign test,

Table 9

Parental Attitude Research Inventory - Mothers

SCALE	GROUP I N=16		GROUP II N=10		GROUP III N=12	
	$\bar{X}$	s	$\bar{X}$	s	$\bar{X}$	s
Breaking Will	6.53	1.82	5.90	1.72	5.75	2.23
Fear Harming Baby	4.56	2.31	3.00	1.62	3.92	1.65
Avoiding Communication	5.50	1.50	4.60	2.06	4.00	1.54
Intrusiveness	5.69	1.49	4.40	1.18	5.42	1.08
Acceleration of Development	6.38	1.45	5.00	2.49	6.08	1.46

is .01. Looking at the mean differences, it was found that Group I mothers were more concerned with Fears of Harming the Baby and Acceleration of Development (significant .10 level) as well as being more Intrusive (significant .05 level) than Group II mothers.

In comparison to Group III mothers, they differed significantly in their tendency to Avoid Communication (significant .05 level); Group III mothers also tended to be more Intrusive than Group II mothers.

Table 10 contains PARI data obtained from the cooperating fathers.

Table 10

Parental Attitude Research Inventory - Fathers

SCALE	GROUP I N=12		GROUP II N=10		GROUP III N=9	
	$\bar{X}$	s	$\bar{X}$	s	$\bar{X}$	s
Breaking Will	5.83	.94	5.80	1.14	5.33	1.00
Strictness	6.58	1.83	6.20	1.62	5.78	1.48
Approval of Activity	4.75	1.66	5.70	1.64	4.89	1.90
Intrusiveness	5.67	1.72	5.90	1.10	6.56	1.59
Avoiding Communication	5.25	1.22	5.00	2.11	5.67	2.40

Again, the higher means tended to be held by the fathers of Group I children (Approval of Activity is scored in the reverse direction). However, this trend was not statistically significant by the sign test. Examination of the individual mean differences also produced no statistically significant results.

b. Projective Analyses. While the PARI was aimed more at conscious attitudes about child development, the use of a projective technique was pointed toward unconscious attitudes regarding children in general. Protocols were obtained on 51 mothers and 50 children. Table 11 contains the results of comparing mothers' responses to the projectives with childrens' behavior in the school temptation situation.

The mothers of Group I children had a mean score of 36.33, the Group II mothers had a mean score of 35.29, while the Group III mothers had a mean of 32.84. In the statistical analyses of differences between these means, the difference

between Group I and Group III was significant at the .06 level of confidence. The other differences, I with II and II with III were not statistically significant. This would suggest that mothers of children who succumbed to temptation at school had a less positive attitude toward children in general than did mothers of the children who did not.

Table 11

School Temptation and Mother's Projectives

	$\bar{X}$	s	t
Group I	36.33	5.16	I & II=.58
Group II	35.29	4.89	I & III=1.99*
Group III	32.84	5.44	II & III=1.33

*significant at .06 level

When the pictures of the children were analysed in the gross fashion of perceiving adults postively or negatively, no differences were found between succumbers and non-succumbers (X^2=1.04).

Next, the mothers' responses to the projectives were compared with the child's behavior at home. These figures can be found in Table 12. The mean score for mothers of succumbers here was 36.06, while the mean score for mothers of the non-temptation group was 33.78. This difference was not statistically significant.

Table 12

Home Temptation Versus Mothers' Projectives

	$\bar{X}$	s	t
Temptation	36.06	6.48	1.40 n.s.
Non-Temptation	33.78	4.67	

Finally, with the findings of Hypothesis IV that some children behaved differently in the various settings, an analysis was made of mothers' projective responses and whether or not the child changed his behavior. Table 13 represents these findings.

Table 13

Change Versus Mothers' Projectives

	TEMPTATION GROUP		NON-TEMPTATION GROUP	
	Change	No Change	Change	No Change
$\bar{X}$	31.50	35.50	36.18	35.14
s	5.14	7.33	6.82	3.84

$t_{Temp.}=1.22$ n.s.
$t_{Non\text{-}Temp.}=.556$ n.s.

For those who succumbed in the school temptation situation, the mothers of those who changed had a mean score of 31.90, while the mothers of those who did not change (i.e., yielded to temptation at home) was 35.50. For those that did not yield in school but did so at home, the mothers had a mean score of 36.18, while those who yielded at neither location had a mean score of 35.14. For neither of these groups was the difference statistically significant.

Table 14

Grouping of Children Groups by Mothers' Projectives

Warm	Less Warm
Temptation - Home	Temptation Group - School
Temptation - Non-Changers	Temptation Group - Changers
Non-Temptation - Changers	Non-Temptation - Non-Changers
Non-Temptation - School	Non-Temptation - Home

While many of the individual mean tests were not significant, there appears to be a logical pattern for the direction of the differences found which runs through all of the analysis, and the combined probabilities would undoubtedly prove significant. This logical pattern will be discussed in the next section. Table 14 presents a visual picture of this pattern.

IV. Discussion

A. Hypothesis I

When the matter of sex differences is approached in a gross, head-counting fashion, there would appear to be no differences between boys and girls in their ability to resist temptation. This is consistent with the findings reported by Grinder (13), Rebelesky (26), and Burton (7). Regardless of the age of the children, both boys and girls appeared to be equally attracted toward the props. The present study went one step further than these earlier works, however, and looked more closely at the actual behavior of the children during the temptation period. Here it was found that the girls were able to resist the temptation for a longer period of time and also engaged in the "forbidden" behavior for a significantly shorter time than the boys. In this way then, they exercised greater self-control.

Of perhaps passing interest is the anecdotal records of how the girls accomplished this. The observers noted (clinically) that the girls engaged in far more animated behavior than the boys. For example, some sang aloud or recited. Another turned her chair completely around, placing her back to the toys. Still another said several times, "You must not touch the toys." Boys, on the other hand, sat more quietly or just walked around. When boys approached the toys and candy, they did so rather deliberately, while the girls tended to explore them more cautiously. One little girl (who was counted as a yielder) approached the off-balance, add-a-number game, added the correct number, and walked back to her seat saying aloud, "There! Now it's right!" She could not resist, but yet she was hardly a gross offender.

Taken in this sense then, the findings would tend to bear out Kohlberg's (17) summary statement that girls tend to be more conforming to rules and regulations than boys although, perhaps, they are still subject to the same temptations.

Turning briefly to the actions of the total group, regardless of sex, it will be recalled that the percentages of "offenders" and "non-offenders" were almost the opposite of the findings of Grinder (13) and Burton (7). Two factors may account

for this--one being the type of task and the second being the type of instructions given. In the previous studies, a definite, concrete reward was at stake, and no adult admonition was presented. Under those circumstances, the child had something to gain and nothing really to lose by succumbing. In the present study, the child had only a little pleasure and release from boredom to gain, while facing the unknown quantity of potential punishment by an adult if he were caught. Thus the two earlier studies (13, 7) may have been tapping how strong the conscience development is under a situation of pressure and reward, while this study may have been closer to control development under the pressure of adult rules. It might prove interesting to combine these two types of settings, since this is frequently more similar to life, i.e., attempting to gain a desired goal which is guarded by certain rules and regulations from authority.

B. Hypothesis II

Statistical analyses of the variable of age failed to show any differences between the age groups in their ability to resist temptation. In only one case, age versus latency - males, (Appendix D) did the F reach a significant level. In light of the fact that this finding was not borne out in the other analyses and that this was one of the groups which lacked homogeneity of variances, a conservative interpretation that this was a "chance" finding appears in order.

These results would appear to concur with the identical percentage findings of transgression for the diverse age groups in the Grinder (13) and Burton (7) studies. Again, there were some suggestive trends that the girls may show some change as a function of age, but the present analysis does not justify this as a formal conclusion.

In terms of theory, the study seems to support the contention of Sears (28) that by age six, conscience development as such has already occurred and that Freud's estimate might have been a little high. For example, the four-year olds of Burton (7) did not respond much differently than Grinder's (13) twelve-year olds. It would appear that if any definitive differences are to be found as a correlate of chronological age, far younger groups may have to be worked with.

C. Hypothesis IV

The findings regarding this hypothesis were very interesting and complex. The complexity derives from the fact that the children did not behave consistently from setting to setting, lending some support to the contention of Hartshorne and May (15, 16) that some degree of specificity exists in honesty.

The relationship between how the children were viewed by the teacher in terms of control and how they behaved in the temptation situation was generally high. A common element was, of course, the fact that both situations were within the school itself and thus governed by non-family adults. In comparing behavior in the temptation situation with behavior in the home situation, it was found that almost half the sample (49%) behaved differently when in the presence of the mother. It might have been anticipated that yielders would show significantly more change than non-yielders. However, it was somewhat surprising to find a number of non-yielders now succumbing to temptation at home.

Related to this, it is of interest to note that how the child behaved in the presence of the mother did not necessarily agree with his behavior in the classroom. The group who maintained control at home tended, as a group, to be rated somewhat lower in control in the school situation by the teacher than those that did not.

In trying to understand some of the factors behind the shifts in behavior, particularly between the two temptation situations, at home and at school, the sex and age of the children who changed versus those who did not were examined. Neither of these two variables successfully differentiated the two groups.

Parenthetically, the differing reactions in the various settings brought to mind the old notion that children have a certain energy level of curiosity or action that seeks to find an outlet. If thwarted in the home, it is released outside the home in other settings. Illustrating this might be the group who gave into temptation at school but were well behaved at home, as well as their opposite, the group who were well behaved in the school situation and then succumbed at home. All the children did not follow this pattern, however, (e.g., children who behaved the same in both settings) and unfortunately, the present study was not designed in such a way as to allow further testing of this intriguing hypothesis.

Trying to understand more about the dynamics underlying the change in behavior from one situation to another led to the next hypothesis.

D. Hypothesis V

It will be recalled that many of the mean differences tests were not statistically significant when this hypothesis was considered. The measures used were gross and subject to error,

particularly when unconscious feelings were being tapped. Nevertheless, viewing all the means as a total group produced an interesting and logical picture. Regardless of the setting, those who succumbed to temptation had mothers who were rated higher in warmth toward children in general than did the mothers of their comparison group of non-succumbers. For example, those that succumbed in school had a higher mean warmth score than those that did not. Also, those that succumbed at home had a higher mean warmth score than the controlled group. The pattern continued with the other two comparison groups. Mothers' warmth was rated higher for those that succumbed in both settings than those that yielded in neither and for those that changed to yielders at home over those that changed to non-yielders.

The results of the PARI did not seem to fit into this schema until behavior in both settings was examined. At first glance, it appeared that the well controlled in school (warmer mothers) also tended to have stricter, more rejecting mothers according to the PARI. However, when this was broken down according to whether or not they changed, the means for non-changers increased, while the means for changers dropped significantly. This, then, was consistent with the findings regarding projective results and behavior for this group. The mothers of those who did not change were less warm (high PARI means also), while the mothers of those who did were more warm (low PARI means also).

Looking at the patterns logically then, it would appear that mothers' attitudes toward children in general and her attitude toward child rearing (which are probably related, since the results are consistent) may be a potent factor in shaping how the child is going to react to temptation in different settings. Since actual control appears to be related to the less warm and somewhat rejecting mother, these results would tend to support the use of identification as a protective defense mechanism. In this respect, these results are somewhat at odds with Sears' (28) contention that it is permissiveness and warmth that facilitate conscience development.

V. Conclusions, Implications, (and Recommendations)

A. Conclusions

1. There were no differences between boys and girls in their ability to resist temptation.

2. Girls tended to show more control than boys in that they resisted the temptation objects for a longer period of time and played with them less after finally succumbing.

3. There were no differences between the age groups for either sex in their ability to resist temptation, the time it took offenders to succumb, or the amount of time engaged in temptation behavior.

4. The child's behavior in regard to self-control would appear to be related to the setting in which he is observed.

5. Children who are well behaved at home will not necessarily be perceived that way in the school situation.

6. Children with warm, accepting mothers tend to exhibit less self-control than children of mothers who are less warm and more strict in their approach to child rearing.

7. Fathers' attitude toward child rearing did not appear to be significantly related to the behavior of the children in this study.

B. Implications (and Recommendations)

Several of the findings of this study appear to have implications for present theory. First is the finding of no age differences which, when coupled with earlier works, suggests that development of behavioral control occurs at a much earlier age than commonly thought (i.e., 6). It also appears that the development of behavioral control in girls is somewhat different than in boys. That is, girls respond equally to the same stimulus but appear to temper their behavior more and are more cautious in their transgressions.

A third implication involves the generality of honesty. To be sure, there are different meanings attached to these terms in different studies. However, it would appear from the present study, and earlier ones, that setting cannot be discounted, and any given child may react differently when the setting is changed. Another implication related to this is that the mother's attitude toward children in general may be a prominent factor in the development of self-control as well as differentiating the child who is consistent in all settings from the one who varies. These results suggest that the stricter, less warm mother is the one who is most apt to accelerate behavioral self-control.

A final implication is related to the differential behavior of the child at home and in the school. This may account for misunderstandings on the part of parents who cannot understand why a teacher may not see their children as positively as they appear to act at home.

This study was intended as a stepping stone and not as a final product. Before the question of behavioral control with all its implications for school as well as society can be answered, there have to be further refinements in techniques. One of the major recommendations would be to increase the scope of the present study, extending the age limits, as well as varying the design. One additional setting worth studying is that of adult admonition accompanied by a challenge setting.

Of perhaps greater importance to this type of research, however, is the need to offer some kind of incentive to families to participate. The present experimenters worked hard in attempting to get families involved. However, with the present attitudes toward research and testing, they were also careful not to offend. Much valuable data were lost from non-participating families because they failed to see any value in this for them. It might even be conjectured that these may be some of the most important to study.

The practical implications of the study are somewhat limited. The results would suggest, however, that present theories being taught teachers may not be consistent with the facts. Perhaps educators should make potential teachers more aware of the extended limits of normal behavior in the early-grade child and not to be too quick to label a difficult-to-control child as a psychological problem. Also, perhaps teachers need to be made aware that boys are apt to come to them more normally unmanageable than girls (due to differential treatment by parents) and that new classroom procedures may need to be developed to cope with the situation.

On the parental side, the cry is frequently made that early teachers label their children in such a way that this label follows them throughout the rest of their schooling. Stretching interpretation of research results could lead one to hypothesize that indeed the child does <u>not</u> change significantly (at least in self-control) and may objectively deserve continuation of some of these labels.

Finally, the results suggest that there needs to be far greater cooperation between the parent and the teacher in the socialization and education of the child. For some reason, these two groups frequently see themselves as antagonists, working against each other. Instead, they need to view themselves as a team, each contributing knowledge to and about the child; working toward developing a better student and a better citizen.

VI. Summary

This study was focused primarily on the development of self-control in children. One of its aims was to pave the way toward clearer understanding of the early-grade child for both parent and teachers. It was felt that these early encounters are crucial to the child's future outlook regarding education and that any information a study could provide about this age group would be of value.

There were two major objectives:

1. To study change in self-control as a function of chronological age;

2. to investigate certain major variables previously suggested as major correlates of this development. Namely sex, parental attitudes, and types of settings.

To meet these two objectives, four hypotheses were formulated and tested:

1. No differences will exist between the sexes in their ability to resist temptation.

2. No difference will exist between children of the various age levels and their ability to resist temptation.

3. There will be no difference between the child's ability to control himself in any of the formally recorded conditions.

4. There will be no difference in the degree of behavioral control of children who are rejected versus those who are not.

The subjects were 114 children (53 boys and 61 girls) ranging in age from 6 years, 0 months, and 0 days, to 7 years, 11 months, 29 days. For comparison purposes, they were divided successively into age brackets of six months each.

Data on subjects were collected from three different sources:

1. An Isolated Temptation Situation. The child was left alone for fifteen minutes in a room containing toys and was instructed not to touch the toys. His behavior was recorded by an observer concealed in an observation booth in the room.

2. In the Presence of Mother and Two Other Adults (Experimenters). While interview data were being collected on the mother, it was requested that the child be

present. The experimenters carried a briefcase of toys, which was left open on the floor. The second member of the experimental team observed and recorded the child's behavior during the period.

3. The Classroom. Teachers submitted ratings on each child regarding his degree of control in the school.

Analyses of the data from these various settings led to the following findings and conclusions:

1. There were no differences between boys and girls in their ability to resist temptation.

2. Girls tended to show more control than boys in that they resisted the temptation objects for a longer period of time and played with them less after finally succumbing.

3. There were no differences between the age groups for either sex in their ability to resist temptation, the time it took offenders to succumb, or the amount of time engaged in temptation behavior.

4. The child's behavior in regard to self-control would appear to be related to the setting in which he is observed.

5. Children who are well behaved at home will not necessarily be perceived that way in the school situation.

6. Children with warm, accepting mothers tend to exhibit less self-control than children of mothers who are less warm and more strict in their approach to child rearing.

7. Fathers' attitude toward child rearing did not appear to be significantly related to the behavior of the children in the study.

These findings suggest that conscience development and behavioral control may begin at a much earlier age than previously thought. Also, these results suggest that the development is somewhat different in girls than boys in that the former, while attracted by the same temptation, appears to be better able to restrict their transgressions.

Also implied by the results is the need to better educate our teachers and parents regarding the normal limits of behavior. A seemingly difficult to control child may not necessarily be a psychological problem but rather a developmental one.

Finally, it was suggested that teacher and parent should work as a team in facilitating the educational and social development of the child.

VII. Selected References

1. Allport, Gordon W. Personality, a Psychological Interpretation. New York: Holt, 1937.

2. Aronfreed, J. "The Nature, Variety, and Social Patterning of Moral Responses to Transgression," Journal of Abnormal and Social Psychology. 63, 1961. p. 223-240.

3. Barbu, Z. "Studies in Children's Honesty," Quarterly Bulletin of British Psychology and Sociology. 2, 1951. p. 53-57.

4. Boehm, L., and Nass, M. L. "Social Class Differences in Conscience Development," Child Development. XXVIII, 1957. p. 565-575.

5. Brogden, H. E. "A Factor Analysis of 40 Character Traits," Psychological Monographs. 52 (3, Whole No. 234), 1942. p. 39-55.

6. Bronfenbrenner, U. "The Role of Age, Sex, Class, and Culture in Studies of Moral Development, " Religious Education. 57 (4 Res. Suppl.), S 3 - S 17, 1962.

7. Burton, R. V., Maccoby, Eleanor E., & Allinsmith, W. "Antecedents of Resistance to Temptation in Four-Year Old Children," Child Development. 32, 1961. p. 689-710.

8. Burton, R. V. "Generality of Honesty Reconsidered," Psychological Review. 70, 1963. p. 481-499.

9. Dennis, W. "Animism and Related Tendencies in Hopi Children," Journal of Abnormal and Social Psychology. 38, 1943. p. 21-36.

10. Diamond, S. Information and Error. New York: Basic Books. 1960. 307p.

11. Eysenck, H. J. The Structure of Human Personality. New York: John Wiley and Sons. 1953.

12. Freud, S. The Basic Writings of Sigmund Freud. (Translated by A. A. Brill), New York: Modern Library. 1938.

13. Grinder, R. E. Behavior in a Temptation Situation and its Relation to Certain Aspects of Socialization. Unpublished doctoral dissertation, Harvard University. 1960.

14. Harrower, M. R. "Social Status and Moral Development," British Journal of Educational Psychology. 1935. p. 75-95.

15. Hartshorne, H. & May, M. A. Studies in the Nature of Character. Vol. 1, Studies in Deceit. New York: Macmillan. 1928.

16. Hartshorne, H. & May, M. A. Studies in the Nature of Character. Vol. 2, Studies in Service and Self-Control. New York: Macmillan. 1929.

17. Kohlberg, L. "Moral Development and Identification," Child Psychology. 1963. p. 277-332.

18. Liu, C. The Influence of Cultural Background on Moral Judgment of Children. Unpublished doctoral dissertation, Columbia University. 1950.

19. MacKinnon, D. W. "Violation of Prohibitions," In H. W. Murray (Ed.), Explorations in Personality. Oxford University Press. 1938. p. 491-501.

20. Magoon, I. M. Academic Performance in Grades, 1-12 of Marginal College Applicants. Paper read at American Psychological Association's 71st Annual Convention, Philadelphia, Pennsylvania. September, 1963.

21. McClelland, D., Atkinson, J., Clark, R., & Lowell, E. The Achievement Motive. New York: Appleton-Century-Crofts. 1953.

22. Meyer, W. J., & Thompson, G. G. "Sex Differences in the Distribution of Teacher Approval and Disapproval Among 6th Grade Children," Journal of Educational Psychology. 47, 1956. p. 385-390.

23. Maller, J. B. "General and Specific Factors in Character," Journal of Social Psychology. 5, 1934. p. 97-102.

24. Peel, E. A. "Experimental Examination of Some of Piaget's Schemata Concerning Children's Perception and Thinking and a Discussion of Their Educational Significance," British Journal of Educational Psychology. XXIX, 1959. p. 89-103.

25. Piaget, J. The Moral Judgment of the Child. New York: Narcourt and Brace. 1932.

26. Rebelesky, Freda G. Sex Differences in the Use of Confession. Unpublished doctoral dissertation, Radcliffe College. 1960.

27. Shaefer, E. S. & Bell, R. Q. Parental Attitude Research Instrument. Mimeographed. National Institutes of Health. 1957.

28. Sears, R. R., Maccoby, Eleanor E., & Levin, H. (Eds), Patterns of Child Rearing. Evanston, Ill., Row and Paterson. 1957.

29. Travis, Lee. The Travis Projective Pictures. California: Griffin-Patterson Co., Inc. 1957.

30. Walker, E. L. & Heyns, R. W. An Anatomy for Conformity. New Jersey: Prentice-Hall. 1962.

31. Walsh, R. P. Determinants of Psycho-Social Behavior. Unpublished mimeographed paper. 1963.

32. Whiting, J. W. M. & Child, I. L. Child Training and Personality: A Cross-Cultural Study. New Haven: Yale University Press. 1953.

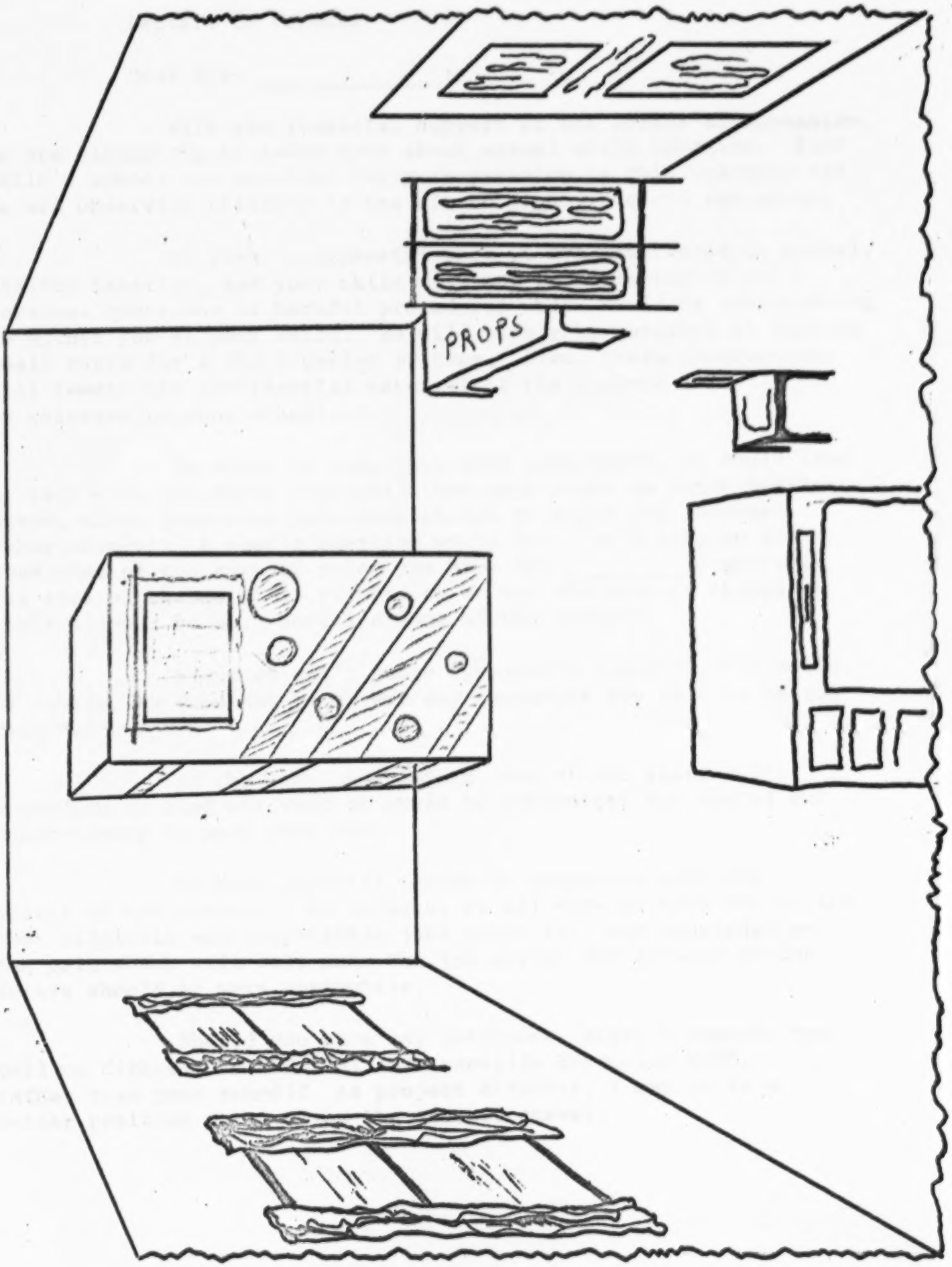
VIII. Appendices

A. Appendix A

Props Used

1. Smack-A-Roo
2. Ironing Board and Iron
3. Toy Telephone
4. Tom Thumb Cash Register
5. Tommy-Burst "Zero" Gun
6. Toy Trumpet
7. Woody Woodpecker Talking Puppet
8. Susy Cute Doll and Crib
9. Etch-A-Sketch
10. Add-A-Count
11. Road Race Top
12. Wonderful Willy
13. Tonka Horse Farm Truck

Experimental Setting



B. Appendix B

Letters to Parents

Dear Mrs. _____:

With the financial support of the Office of Education, we are attempting to learn more about normal child behavior. Your child's school has extended their cooperation in this venture, and we are observing children in the six to eight-year old age group.

We wish to emphasize that we are interested in normal, healthy behavior, and your child will not be subjected to any personal questions or harmful procedures which would be embarrassing to either you or your child. He will simply be observed at solving small tasks for a short period of time. Also, these observations will remain the confidential material of the project and will not be released to your school.

In order to make this more meaningful, we would like to talk with you about your child and your views on child rearing. Again, these questions have been chosen to avoid any personal embarrassment. A sample question would be: "We'd like to get some idea of the sort of rules you have for _____in general. The sort of things he is allowed to do and the sort of things he isn't allowed to do. What are some of the rules?"

Since we can't judge everyone's reaction, you would, of course, be free not to answer any questions you felt to be too personal for you.

In the very near future, one of our staff will phone you to find out when it would be convenient for one of our interviewers to meet with you.

We hope you will choose to cooperate with the spirit of the project. As parents, we all know we have one of the most difficult and responsible jobs there is. Any knowledge we can gain which will help make the job easier for parents of the future should be very worthwhile.

Should you have any questions, might I suggest you call me directly at 462-1041, Edwardsville Extension 2100, rather than your school? As project director, I may be in a better position to give you the correct answer.

C. Appendix C

INVENTORY OF ATTITUDES ON FAMILY LIFE AND CHILDREN (PARI)

Read each of the statements below and then rate them as follows:

A	a	d	D
strongly agree	mildly agree	mildly disagree	strongly disagree

Indicate your opinion by drawing a circle around the "A" if you strongly agree, around the "A" if you mildly agree, around the "d" if you mildly disagree, and around the "D" if you strongly disagree.

There are no right or wrong answers, so answer according to your own opinion. It is very important to the study that all questions be answered. Many of the statements will seem alike but all are necessary to show slight differences of opinion.

1. Children should be allowed to disagree with their parents if they feel their own ideas are better.

2. A good mother should shelter her child from life's little difficulties.

3. The home is the only thing that matters to a good mother.

4. Some children are just so bad they must be taught to fear adults for their own good.

5. Children should realize how mush parents have to give up for them.

6. You must always keep tight hold of baby during his bath for in a careless moment he might slip.

7. People who think they can get along in marriage without arguments just don't know the facts.

8. A child will be grateful later on for strict training.

9. Children will get on any woman's nerves if she has to be with them all day.

10. It's best for the child if he never gets started wondering whether his mother's views are right.

11. More parents should teach their children to have unquestioning loyalty to them.

12. A child should be taught to avoid fighting no matter what happens.

13. One of the worst things about taking care of a home is a woman feels that she can't get out.

14. Parents should adjust to the children some rather than always expecting the children to adjust to the parents.

15. There are so many things a child has to learn in life there is no excuse for him sitting around with time on his hands.

16. If you let children talk about their troubles they end up complaining even more.

17. Mothers would do their job better with the children if fathers were more kind.

18. A young child should be protected from hearing about sex.

19. If a mother doesn't go ahead and make rules for the home the children and husband will get into troubles they don't need to.

20. A mother should make it her business to know everything her children are thinking.

21. Children would be happier and better behaved it parents would show an interest in their affairs.

22, Most children are toilet trained by 15 months of age.

23. There is nothing worse for a young mother than being alone while going through her first experience with a baby.

24. Children should be encouraged to tell their parents about it whenever they feel family rules are unreasonable.

25. A mother should do her best to avoid any disappointment for her child.

26. The woman who wants lots of parties seldom makes a gppd mother.

27. It is frequently necessary to drive the mischief out of a child before he will behave.

28. A mother must expect to give up her own happiness for that of her child.

29. All young mothers are afraid of their awkwardness in handling and holding the baby.

30. Sometimes it's necessary for a wife to tell off her husband in order to get her rights.

31. Strict discipline develops a fine strong character.

32. Mothers very often feel that they can't stand their children a moment longer.

33. A parent should never be made to look wrong in a child's eyes.

34. The child should be taught to revere his parents above all other grown-ups.

35. A child should be taught to always come to his parents or teachers rather than fight when he is in trouble.

36. Having to be with children all the time gives a woman the feeling her wings have been clipped.

37. Parents must earn the respect of their children by the way they act.

38. Children who don't try hard for success will feel they have missed out on things later on.

39. Parents who start a child talking about his worries don't realize that sometimes it's better to just leave well enough alone.

40. Husbands could do their part if they were less selfish.

41. It is very important that young boys and girls not be allowed to see each other completely undressed.

42. Children and husbands do better when the mother is strong enough to settle most of the problems.

43. A child should never keep a secret from his parents.

44. Laughing at children's jokes and telling children jokes makes things go more smoothly.

45. The sooner a child learns to walk the better he's trained.

46. It isn't fair that a woman has to bear just about all the burden of raising children by herself.

47. A child has a right to his own point of view and ought to be allowed to express it.

48. A child should be protected from jobs which might be too tiring or hard for him.

49. A woman has to choose between having a well run home and hob-nobbing around with neighbors and friends.

50. A wise parent will teach a child early just who is boss.

51. Few women get the gratitude they deserve for all they have done for their children.

52. Mothers never stop blaming themselves if their babies are injured in accidents.

53. No matter how well a married couple love one another, there are always differences which cause irritation and lead to arguments.

54. Children who are held to firm rules grow up to be the best adults.

55. It's a rare mother who can be sweet and even tempered with her children all day.

56. Children should never learn things outside the home which make them doubt their parents' ideas.

57. A child soon learns that there is no greater wisdom than that of his parents.

58. There is no good excuse for a child hitting another child.

59. Most young mothers are bothered more by the feeling of being shut up in the home than by anything else.

60. Children are too often asked to do all the compromising and adjustment and that is not fair.

61. Parents should teach their children that the way to get ahead is to keep busy and not waste time.

62. Children pester you with all their little upsets if you aren't careful from the first.

63. When a mother doesn't do a good job with children it's probably because the father doesn't do his part around the home.

64. Children who take part in sex-play become sex criminals when they grow up.

65. A mother has to do the planning because she is the one who knows what's going on in the home.

66. An alert parent should try to learn all her child's thoughts.

67. Parents who are interested in hearing about their children's parties, dates, and fun help them grow up right.

68. The earlier a child is weaned from its emotional ties to its parents, the better it will handle its own problems.

69. A wise woman will do anything to avoid being by herself before and after a new baby.

70. A child's ideas should be seriously considered in making family decisions.

71. Parents should know better than to allow their children to be exposed to difficult situations.

72. Too many women forget that a mother's place is in the home.

73. Children need some of the natural meanness taken out of them.

74. Children should be more considerate of their mothers since their mothers suffer so much for them.

75. Most mothers are fearful that they may hurt their babies in handling them.

76. There are some things which just can't be settled by a mild discussion.

77. Most children should have more discipline than they get.

78. Raising children is a nerve-wracking job.

79. The child should not question the thinking of his parents.

80. Parents deserve the highest esteem and regard of their children.

81. Children should not be encouraged to box or wrestle because it often leads to trouble or injury.

82. One of the bad things about raising children is that you aren't free enough of the time to do just as you like.

83. As much as is reasonable a parent should try to treat a child as an equal.

84. A child who is "on the go" all the time will most likely be happy.

85. If a child has upset feelings it is best to leave him alone and not make it look serious.

86. If mothers could get their wishes they would most often ask that the husband be more understanding.

87. Sex is one of the greatest problems to be contended with in children.

88. The whole family does fine if the mother puts her shoulders to the wheel and takes charge of things.

89. A mother has a right to know everything going on in her child's life because her child is part of her.

90. If parents would have fun with their children, the children would be more apt to take their advice.

91. A mother should make an effort to get her child toilet trained at the earliest possible time.

92. Most women need more time than they are given to rest up in the home after going through childbirth.

93. When a child is in trouble he ought to know he won't be punished for talking about it with his parents.

94. Children should be kept away from all hard jobs which might be discouraging.

95. A good mother will find enough social life within the family.

96. It is sometimes necessary for the parents to break the child's will.

97. Mothers sacrifice almost all their own fun for their children.

98. A mother's greatest fear is that in a forgetful moment she might let something bad happen to the baby.

99. It's natural to have quarrels when two people who both have minds of their own get married.

100. Children are actually happier under strict training.

101. It's natural for a mother to "blow her top" when children are selfish and demanding.

102. There is nothing worse than letting a child hear criticisms of his mother.

103. Loyalty to parents comes before anything else.

104. Most parents prefer a quiet child to a "scrappy" one.

105. A young mother feels "held down" because there are lots of things she wants to do while she is young.

106. There is no reason parents should have their own way all the time, anymore than that children should have their own way all the time.

107. The sooner a child learns that a wasted minute is lost forever the better off he will be.

108. The trouble with giving attention to children's problems is they usually just make up a lot of stories to keep you interested.

109. Few men realize that a mother needs some fun in life too.

110. There is usually something wrong with a child who asks a lot of questions about sex.

111. A married woman knows that she will have to take the lead in family matters.

112. It is a mother's duty to make sure she knows her child's innermost thoughts.

113. When you do things together, children feel close to you and can talk easier.

114. A child should be weaned away from the bottle or breast as soon as possible.

115. Taking care of a small baby is something that no woman should be expected to do all by herself.

THE INTERVIEW SCHEDULE

1. First of all, we'd like to get a picture of the family. How many children do you have?
    a. How old are they?

(If more than one child) In this interview, we want to talk mostly about X, since he's in the group we are working with.

2. Has X been with you all his life, or have you been separated from him at any time?
    a. (If separated) For how long? How old was he then?

3. And how about his father--has X been separated from his father at any time?
    a. (If separated) For how long? How old was X then?

4. Now, would you think back to when X was a baby--who took care of him mostly then?
    a. How much did your husband do in connection with taking care of X when he was a baby?
    b. Did he ever change the baby's diapers? Feed him? Give him his bath?

5. All babies cry, of course. Some mothers feel that if you pick up a baby every time it cries, you will spoil it. Others think you should never let a baby cry for very long. How do you feel about this?
    a. What did you do about this with X?
    b. How about in the middle of the night?

6. Did you have time to spend with the baby besides the time that was necessary for feeding him, changing him, and just regular care like that?
    a. (If yes) Tell me about what you did in this time. How much did you cuddle him and sing to him and that sort of thing?

7. Do you think that babies are fun to take care of when they're very little, or do you think they're more interesting when they're older?

8. Have you had any problems about X eating enough, or eating the kinds of food he needs?
    a. What do you do about it?

9. Does X eat at the table with the family for the evening meal?

10. What do you expect or require of X in the way of table manners?
    a. Do you expect him to stay at the table through the meal, or is he allowed to leave the table?
    b. Is he allowed to use his fingers?
    c. How about interrupting adult conversation--is that allowed?
    d. What else do you think can be expected of a 6 to 8-year-old in the way of table manners?

11. What do you do about it if he does some of the things you don't allow?

12. And suppose for several days he eats very nicely and doesn't give you any trouble at the table--what would you do?

13. Now we want to change the subject: the question of being neat and orderly and keeping things clean--what do you expect or require of X as far as neatness is concerned?
    a. How do you go about getting him to do this?

14. How important do you think it is for him to be careful about marking on the walls and jumping on the furniture and things like that?
    a. What do you do about it if he does these things?
    b. And how about teaching children to respect the things that belong to other members of the family--what have you done about this with X?

15. We'd like to get some idea of the sort of rules you have for X in general--the sort of things he is allowed to do and the sort of things he isn't allowed to do. What are some of the rules?
    a. How about bedtime?
    b. How about making noise in the house--how much of that do you allow?
    c. How about the amount of time he can spend listening to the radio or watching TV programs?
    d. How far away is he allowed to go by himself?
    e. Any other rules?

16. Do you think a child of X's age should be given any regular jobs to do around the house?
    a. Does K have any regular jobs he is supposed to do?
    b. (If yes) How do you go about getting him to do this?

17. How much do you have to keep after X to get him to do the things he is supposed to do?

18. Some parents expect their children to obey immediately when they tell them to be quiet or pick up something and so on. Others don't think it's terribly important for a child to obey right away. How do you feel about this?
    a. How does your husband feel about strict obedience?

19. If you ask X to do something, and he jumps up right away and does it, how do you react? (Do you say something to him?)

20. If he doesn't do what you ask, do you ever just drop the subject, or do you always see to it that he does it?

21. Do you keep track of exactly where X is and what he is doing most of the time, or can you let him watch out for himself quite a bit?
    a. How often do you check?

22. How much attention does X seem to want from you?
    a. How about following you around and hanging on to your skirts?
    b. (If not much) Did he ever go through a stage of doing this?
    c. How do you (did you) feel about it when he hangs on to you and follows you around?
    d. How do you generally react, if he demands attention when you're busy?
    e. How about if X asks you to help him with something you think he could probably do by himself?

23. How does X react generally when you go out of the house and leave him with someone else?

24. Have you ever felt that X is growing up too fast in any way?
    a. How did you feel about his starting school?
    b. Have things been easier or pleasanter for you in any way since he's been in school?

25. I'm wondering if you could tell me more about how you and X get along together. What sort of things do you enjoy in X?
    a. In what ways do you get on each other's nerves?
    b. Do you show your affection toward each other quite a bit, or are you fairly reserved people, you and X?
    c. Do you ever find time to play with X just for your own pleasure? Tell me about that.

26. Before X started kindergarten, did you teach him anything like reading words, or writing the alphabet, or drawing, or telling time, things like that?
    a. Anything else you taught him?
    b. How did you happen to teach him these things?

27. How important is it to you for X to do well in school?
    a. How far would you like him to go in school?

28. Now we want to talk about whether you think there are any differences in bringing up boys and bringing up girls. How important do you think it is for a boy of X's age to act like a real boy (for a girl to be ladylike)?
    a. (For boys) How about playing with dolls and that sort of thing?
    b. (For girls) How about playing rough games and that sort of thing?
    c. Do you feel there is any difference in the way boys and girls ought to act at X's age?
    d. What have you taught him about how you want him to treat little girls?

29. (If X has siblings) Would you tell me something about how X and his brother (sister) get along together?
    a. How do you feel about it when they quarrel?
    b. How bad does it have to get before you do something about it?
    c. How do you handle it when the children quarrel? Give me an example.
    d. Now how about when things are going smoothly among the children: do you do anything to show them that you have noticed this?
    e. (If yes). What sort of thing would you do?

30. In general, how does X get along with the neighbor children?

31. Now how about when X is playing with one of the other children in the neighborhood and there is a quarrel or a fight--how do you handle this?

32. Sometimes a child will get angry at his parents and hit them or kick them or shout angry things at them. How much of this sort of thing do you think parents ought to allow in a child of X's age?
    a. How do you handle it when X acts like this? Give me an example.
    b. (If this doesn't happen) How did you teach him not to do this?
    c. How much of a problem have you had with X about shows of temper and angry shouting and that sort of thing around the house?

33. How do you handle it if X is saucy or deliberately disobedient?

34. We'd like to get some idea of how X acts when he's naughty. (I know we've been talking about naughty behavior a lot, and we don't mean to imply that he's naughty all the time or anything, but most children do act up once in a while, and we're interested in knowing about it.) For instance, when he has deliberately done something he knows you don't want him to do, when your back is turned, how does he act?

a. Does he ever come and tell you about it without your having to ask him?
b. When you ask him about something he has done that he knows he's not supposed to do, does he usually admit it or deny it?
c. What do you do about it if he denies something you are pretty sure he has done?

We have been talking about how you handle X in many different kinds of situations: table manners, neatness, and so on. Now we'd like to know something about how you go about correcting X and getting him to behave the way you want him to, regardless of the particular kind of behavior that is involved.

35. Do you have any system of rewarding him for good behavior?
a. Do you have any ways that he can earn money?
b. Can he earn points or gold stars or anything like that?

36. Some parents praise their children quite a bit when they are good, and others think that you ought to take good behavior for granted and that there's no point in praising a child for it. How do you feel about this?

37. In training X, do you ever say: "Your daddy and mother do it this way"? Do you say that? Under what circumstances?
a. Who else do you hold up as an example--his older brother (sister)? grandparents? other relatives? playmates?
b. Is there anyone you mention as an example of what <u>not</u> to do? For instance--you're acting just like so-and-so--you wouldn't want to be like him, would you?

38. How often do you spank X?
a. How about your husband? How often does he spank him?
b. For instance, how often Has X been spanked in the last two weeks?

39. How about when he was younger--say two or three years old. How often did you spank him then?

40. How does he act when you spank him--does it seem to hurt his feelings, or make him angry, or what?

41. How much good do you think it does to spank X?

42. Do you ever deprive X of something he wants as a way of disciplining him? (Give examples, if necessary) (If yes) How often? (Frequently of rarely)

43. Would you imagine now that you are scolding X for something he has done that you don't want him to do. What would you say to him?
    a. What else might you say?
    b. Do you warn him about what you might do if he doesn't behave?
    c. Do you ever tell him what else might happen if he doesn't behave? (For instance, how about warning him that he might get hurt? How would you say it?)

44. Is there any other kind of remark you make fairly often to X?

45. How often do you tell X that you're going to have to punish him and then for some reason you don't follow through?
    a. What kinds of things might keep you from following through?

46. Now we'd like to talk for awhile about X and his father. Will you tell me something about the way they act toward each other?
    a. For instance, when your husband comes home from work, when X is there, what happens?
    b. How about after dinner?
    c. What other kinds of things do they do together?

47. How much does your husband do these days in connection with taking care of X? What kinds of things does he do?
    a. How about helping him to get dressed? getting his meals? taking him to school?
    b. Does he ever stay with him when you are out?

48. What do you think your husband's attitude is toward the child?
    a. Does he show affection toward him quite often (Hugging him and kissing him and that sort of thing) or is he fairly reserved with him?

49. When X has to be disciplined, who usually does it, you or your husband (assuming both of you are there)?
    a. How strict is your husband with X?
    b. Does he ever do anything in disciplining X that you'd rather he didn't do?

50. In general, how well would you say you and your husband agree about the best way to handle X?
    a. Does he ever think you are too strict or not strict enough?
    b. Can you give me an example of a case where you didn't agree entirely?

51. We are wondering about who makes the main decisions about the children. In some families it is the father; in others, he leaves it all to the mother. How does that work out in your family?
    a. For instance, in deciding how far away from the house he's allowed to go by himself?
    b. How about health matters such as:
        1) Calling the doctor
        2) or keeping him indoors for the day
        Who decides that?
    c. Who decides how much X should help you or his father around the house?

52. How about in other things besides things that affect the children--who generally makes the decisions in your family?
    a. How about money matters?
    b. Who handles the money, pays the bills, and so on?
    c. Who has most to say in deciding what you will do in your leisure time?
    d. How about if you were considering moving to a different house--who would have most to say about a decision like that?

53. In some families, the work is more or less divided up between what the wife does and what the husband does. For instance, it will be the wife's job to wash dishes and the husband's job to mow the lawn and take care of the furnace. In other families everybody helps with everything. How is this in your family?

54. Do you think X takes after you or after his father more? In what ways?
    a. Does he imitate your speech or walk or mannerisms at all?
    b. Does he imitate these things in his father?

55. Do you think X behaves better with you or with his father?
    a. How do you account for that?

56. How much alike would you say you and your husband are? That is, in terms of your temperament, and the things you think are important in life, and so on?
    a. In what ways are you different from each other? How about in little things?
    b. (With respect to traits in which different) Would you rather have X be like you or like your husband in this respect?
    c. (If no difference) In what ways would you like the child to be like the two of you and what ways different?

This brings us pretty much to the end of the interview. There's just one more thing we'd like to consider, and that is how you feel about being a mother.

57. I wonder if you would think back to when you first discovered you were pregnant with X. How did you feel about it?
    a. How about your husband--how did he feel about it?

58. From the standpoint of your financial condition, and the ages of the other children, and so on, did you feel this was a good time to have a baby?

59. Looking back on it now, do you think things would have worked out better for you if you had waited longer to have X? Tell me about this?

60. Did you have any kind of job before you started having your family?
    a. What kind of work did you do?
    b. (If yes) How did you feel about giving up your work?

61. Some mothers feel that their main job is to stay home and take care of the children. At the same time they sometimes feel that they owe it to themselves to do some outside work or at least have quite a few outside interests. What is your point of view about this?
    a. How well do you feel you've been able to solve this problem in your own case?
    b. Have you ever felt you'd rather be doing something else than what you're doing now?

62. Now looking back to your own childhood--how would you compare the way your mother raised you with the way you're raising your own children?
    a. (If difference) How do you feel about these changes?

D. Appendix D - Analyses of Variance Tables

Age Versus Latency Time - Males

Source	Sum of Squares	df.	Mean Square	F
Age	88.86	3	29.62	
Individual	134.38	17	7.90	3.75*
TOTALS	223.24			

*Significant at .05 level
F_{max}=15.96 Significant at .05 level

Age Versus Latency Time - Females

Source	Sum of Squares	df.	Mean Square	F
Age	7.04	2	3.52	
Individual	460.77	18	25.59	>1.0
TOTALS	467.81			n.s.

F_{max}=1.54 Not significant

Age Versus Play Time - Males

Source	Sum of Squares	df.	Mean Square	F
Age	77.48	3	25.83	
Individual	236.33	17	13.90	1.86
TOTALS	313.81			n.s.

F_{max}=2.01 Not significant

Age Versus Play Time - Females

Source	Sum of Squares	df.	Mean Square	F
Age	23.20	2	11.60	
Individual	193.09	18	10.73	1.08
TOTALS	216.29			n.s.

F_{max}=11.81 Significant at .05 level